

Agriculture research

Retrenchment plan launched

PUTTING a brave face on its sorry state of affairs, the Agricultural and Food Research Council (AFRC) last week launched its Corporate Plan, an outline of the financial expectations and research priorities for the Agricultural and Food Research Service (AFRS) for 1984 to 1988. The most drastic and immediate part of the plan involves, as expected (see *Nature* 8 December, p.523), the closure of AFRC's Letcombe Laboratory and the Weed Research Organization, and an overall loss of 250 jobs by next spring. Another 250 posts will have disappeared by 1986-87 even on the somewhat optimistic financial basis on which the plan has been drawn up.

Of the impending redundancies, about a hundred will have to be compulsory and about half will be scientific staff. Posts will be lost at most of AFRC's institutes. Some of the redundancies at Rothamsted Experimental Station are designed to make space for incoming members of the Letcombe Laboratory, whose research is to survive their institute's closure. Similarly, some of the staff of the Long Ashton Research Station are to make way for retained members of the doomed Weed Research Organization. These changes will save AFRC £2.4 million a year and represent a major cut-back in research on the growth and protection of arable crops.

Other areas of research that have been deemed to be over-supported include nutritional imbalance and trace elements in animals, infectious diseases of animals and the nutrition and production of cattle,

sheep and pigs. Each of these areas of research is to be cut back by £1 million a year. Lamenting the cuts last week, AFRC's secretary, Dr Ralph Riley, said it was distasteful that some excellent work of great relevance to food and agricultural production would have to be stopped, but said it was inevitable that some areas of research had to suffer if those identified as under-supported were to grow under current and projected financial constraints.

In its look ahead, AFRC projects an AFRS expenditure of £131 million by 1987-88, an apparent increase of 7 per cent over 1983-84 but a loss of 7 per cent in real terms, even if inflation is held to a modest 3-4 per cent per annum. The restructuring and redundancies have been worked out on that projection but, warned Dr Riley, more problems will emerge if, for example, pay increases to staff next year exceed the 3 per cent allowed for by the Department of Education and Science. Staff costs currently account for at least 60 per cent of expenditure but that should fall by a few percentage points by 1987-88.

In its corporate plan, AFRC confirms its intention to carry through two shifts in policy that have been strongly recommended to it. The first is a shift towards the support of food research, recommended by the Advisory Council for Applied Research and Development last year. In response, "food" has been incorporated in the title of the erstwhile Agricultural Research Council and expenditure on food science is

New company's plans

THE Agricultural Genetics Company (AGC), founded in July to exploit biotechnological discoveries in five institutes and one unit of AFRC, hopes to raise about £10 million from new and old investors and to build a laboratory in Cambridge during 1984. Acknowledging that UK government cutbacks in support of AFRC had helped create the climate for AGC's formation, Dr Roger Gilmour, its chief executive, implied last week that changes in attitude within AFRC towards the commercialization of its research must continue.

Speaking at the end of a two-day meeting convened by AFRC to review the first five years of its programme of genetic manipulation of crop plants, Dr Gilmour explained that a confidentiality committee had been set up to make rapid decisions on the commercial potential of discoveries reported in papers that AFRC scientists hoped to publish. Any papers that had to be suppressed to protect commercial interests would still be accredited to the authors' files. The first product of AGC, he said, would be improved inoculations of

Rhizobium bacteria, responsible for the nitrogen-fixing nodules formed on the roots of legumes.

Earlier in the meeting, Professor Joe Key of the University of Georgia, Atlanta, and a consultant to the US company Agrigenetics, had paid what he described as a back-handed compliment to the AFRC programme of genetic manipulation of crop plants. It was, he said, far better value than anything produced by the United States Department of Agriculture which was inflexible, unwilling to submit its programme to peer review and too concerned with the criterion of relevance. His plea that relevance should not dominate the choice of priorities in agricultural research reflected a similar plea from Professor Harold Woolhouse, director of the John Innes Institute who also urged that the problems of agriculture in developing countries should not be forgotten. On the same subject, Gilmour later said that fears that his company would ignore the needs of developing countries were overdone. In the first place AFRC had done nothing for them and in the second he was insulted by suggestions that businessmen did not have social consciences.

Peter Newmark

IRAS discovery

THE Infra-Red Astronomical Satellite (IRAS) has found another star that is surrounded by a dust cloud. The first, Vega, was discovered earlier this year and caused excitement because it was the first known example of a star (other than the Sun) orbited by solid particles, of size 1mm and greater. Such a cloud is thought to have surrounded the Sun early in the evolution of the Solar System. Vega, however, is expected to reach the end of its "main-sequence" lifetime before a planetary system could evolve — assuming the conditions were right for such an evolution.

The second such star, Fomalhaut, is similar to Vega in that it is a well studied main-sequence object that has turned out to be surprisingly bright at infra-red wavelengths. Fomalhaut is twelve times more luminous than the Sun and one fifth as bright as Vega. With a lower surface temperature than Vega (8,800 K compared with 9,600 K), its lifetime should be longer, although IRAS astronomers are as yet unable to provide numbers. Fomalhaut is 22 light years from Earth, and the dust shell is about 100 astronomical units (Earth-Sun distances) in diameter. Although IRAS itself has now ceased operation, the search for similar objects through its data banks continues.

Philip Campbell

projected to grow by 12 per cent (allowing for inflation) over the next four years, by then accounting for about 13 per cent of the total budget. The other shift in policy is towards more university research as urged upon AFRC by the Advisory Board for the Research Councils. Grants to universities should amount to £7.7 million by 1987-88 compared with £4.6 million this year. Much of the extra money will be spent on research on food and human nutrition and, where possible, the university research will be linked to and complement research within an AFRC institute. For example, Professor A. Keller in the department of physics at the University of Bristol is to receive an AFRC grant to carry out biophysical studies on collagen and other meat proteins to complement the biochemical research of the Meat Research Institute.

Dr Riley expressed hopes that the new emphasis on food research would prove to be an enticement to the private sector which would convert the research into benefits for the consumer while providing an additional source of income for AFRC, perhaps in a way parallel to the formation of the Agricultural Genetics Company (see alongside), although no substantial revenue is anticipated from that source by 1987-88. Asked whether the promise of revenue from the private sector would not undermine the council's commitment to basic research, Dr Riley said he was unable to deny the possibility but felt the effect was never likely to be a major one.

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